

### Chemical Warfare Equipment

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- 1. Border Guard Troops chemical equipment consisted of the Shlem-1 gas mask with unidentified canister, and a few old-type yellow-colored protective suits, in poor condition, in each company. this equipment at the Central Chemical Proving Ground near Moscow.
- 2. A major, chemical warfare instructor at the Central Chemical Proving Ground, showed the class a gas mask. He said that the mask, a new development, was chosen from several experimental models as the one best meeting all specifications. It would protect the wearer against any known gas for eight hours /Source insisted this was claimed. It had not been issued to the military forces as yet. Source knew nothing about the factory location.

  25X1A "BM-3" ("BM" stood for "combat modified").

3. Before Source was shown any photographs, he gave the following description of the gas mask and canister:

a. Canister length was about 20 cm. The top and bottom were oval (or elliptical), and were 10-12 x 6-8 cm. Swages were uniformly spaced throughout the canister's length, and there were not more than five swages. The canister contained the same material as the old one but was more efficient and had better endurance. Color of the canister, corrugated tube, and face-piece was silvery gray or creamy white. The corrugated tube was attached to the face-piece under the chin.

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- b. The face-piece covered the face only, and was held in place with a head harness. It was not the helmet-type mask. The eyepieces were round. There was a thin hornlike protuberance extending from the face-piece near the lower part of the nose. This he was told had "air valves" in it. When asked if it might be used to wipe the eyepieces, Source stated that this was speculation as it seemed too narrow for that purpose.

  | Note: such protuberance, if present, could have a number of conceivable uses. There might be a built-in pouch to hold a vaporizable antidote ampule, possibly amylnitrite, to abrogate the necessity of lifting the edge of the face-piece for treatment after the mask was once donned by affected personnel.
- e. After making several crude drawings and discussing them, Source was shown photographs of the helmet mask Shlem-1, the old helmet-type Shlem mask (with the protuberance which could be inverted by the finger to wipe off the inside of the eyepieces), the Mod-0-8 mask face-piece, canister MO-2, and canister MT-4. None of these masks or canisters satisfied Source in similarity. The Shlem helmet mask was not at all correct. The Mod-0-8 did not have the corrugated tube connected under the chin, and the outlet valve was different. The old Shlem helmet-type mask with protuberance was not correct since the protuberance started too high, pointed up rather than down, and was too large. The canisters, although of similar shape, were discarded because they had too many swages and the swages were not evenly spaced throughout. He was then shown the new Soviet GP-civil defense gas mask and canister with the modified outlet valve. He claimed it was similar in all respects except that it lacked the "hornlike" protuberance near the nose. The large blunt outlet valve was similar, and the corrugated tube entered properly under the chin.
- Source said that the clothing decontamination station was a clothing decontamination vehicle. It was similar to the Clothing Decontamination Vehicle AGV-2. It was not demonstrated, but it was said that an item of clothing could be decontaminated in two or three minutes.
- Chemical Proving Ground. This was a special demonstration for senior MGB officers under specific directions of higher headquarters. The demonstration was Secret, and was on the power of the latest Soviet flamethrowers. It was to prove that the USSR could not only shower bullets on the enemy but also flame.
- 6. The student class was arranged in a line across the narrow end of a clearing. Between 150-200 m. in front of the class there were three soldiers, each with one nonportable flamethrower, and one soldier with a portable flamethrower. There were two metallic targets, one 200 m. in front of the flamethrowers and the other 400 m. in front of the flamethrowers (350-400 m. and 550-600 m. respectively in front of the class).
- 7. On command, the soldier at the first nonportable flamethrower laid down by the flamethrower for a moment as if "aiming" or "putting" something on the weapon. Then he jumped up, ran to a line 20-30 m. nearer the class, and pulled a lanyard, thus firing the flame—thrower. The flame ignited in the air approximately halfway to the nearer metallic target (estimated 200 m. from the weapon position) and scored a direct hit on the target, which burst into flame. Source was asked if he saw a projectile leave the weapon. He said he could see none. He was asked if the weapon, when fired, sounded like the report of a rifle or mortar. He said no; it had a hissing sound but no exploding sound as of a gun.

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- 8. On command the second weapon was fired at a second target, about 400 m. from the weapon position. The flame ignited in the air approximately halfway to the target and scored a direct hit on the target. At the conclusion of the demonstration, which lasted only five or 10 minutes, this target was still burning.
- 9. On command the third weapon was fired. This was aimed at the ground and an area extending about 50-100 m. from the weapon position burst into flame.
- 10. The nonportable flamethrower was described as being a large X1A barrel, like an 82-mm. mortar, with a small black object like a pouch visible beside it. The flamethrower's barrels were at different elevations. The barrel of each flamethrower was mounted on some type of two-wheeled cart, similar to the cart mounting the Maxim HMG /see page 50, Material in the Hands of or Possibly Available to the Communist Forces in the Far East, published by Headquarters AFFE, dated June 1953/.
- 11. When shown flamethrower pictures, Source chose the ampule thrower barrel /see Soviet Chemical Warfare Weapons and Equipment, published by US Chml. C., dated 1 June 1950/ as being very similar to the barrels of the three nonportable flamethrowers. He could not remember the handles and leaf sight shown in the picture. The instructor called the weapon a flamethrower.

  Source the 25X1A estimates of 200 m. and 400 m. to the flamethrower targets were not based on data given by the instructor, but were rough guesses by Source. When asked to estimate various distances, it became evident that Source's "400 m." was actually about 200-250 m./
- 12. After the three nonportable flamethrowers were fired, the portable flamethrower was fired on command. This sent out one stream of flame which struck the ground in an area about 50 m. from the weapon position. The portable flamethrower was worn by a man lying in a clearing. Source could see no details. There was only one continuous burst of flame fired by the weapon. When shown pictures of the ROKS-2 and ROKS-3 flamethrowers, Source said that they were of the same type as the one demonstrated.
- a gas shelter large enough for an 8-10 man squad. It consisted of an earth bunker, which was merely a hole in the ground with a roof of logs and earth at ground level and an entrance trench. The entrance trench had double doors. The inner door, which was described as hermetically sealed, consisted of a steel frame and two sliding doors which could be pulled apart in the center into recesses in the side walls. The doors were made of a canvas-type material at least one-half inch thick. There was a mat four inches thick, in front of the outer door for wiping off the feet.

  Comment: Source was checked carefully on the level of the shelter and he maintained that the roof was at ground level. He did not mention the mat for wiping off the feet until asked if there was a box in which to decontaminate the feet before entry. He stuck to these statements. There was a hole in the roof with a filter connected to a pump sitting in the corner. The lecturer said that the air in the shelter would last the squad several hours, but eventually the pump would have to be turned on. Source described the pump as a rotating ventilating machine. He knew no details of the pump, i.e., pump exhaust, number of hoses, or the filter.
  - 14. One smoke pot was 4 to 8 in. tall and 12 in. in diameter. Source believed it was light green with a dark green band around it. It had a scratch block igniter; filling was unknown. Source believed it was called the DSH 110 or 111. Others were shown which were similar to the following: the 5.3 smoke candle, the smoke candle

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DM-11, and the irritant smoke candle YaD-11 /see Soviet Chemical Warfare Weapons and Equipment, published by US Cml. C., dated 1 June 1950/.

any reconnaissance of detector kits, antidotes, or medical treatment kits.

#### Engineer Equipment

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16. The mine exploding cable used in the demonstration was a miniature model, two to three meters long. It was connected by electric wire to a small socket, and was about the thickness of the average electric cord. The miniature mine field was about seven by three meters. The officer who exploded several mines with the cable wore no gloves, and received no shock.

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- the following items of river crossing equipment /see reference book War Office Technical Intelligence #9. Soviet River Crossing Equipment, dated March 1950/:
- a. LG-12 pneumatic boat /see page 6 of above-mentioned reference/ and LMN rubber pneumatic boat /see page 5/.
- b. A-3 pneumatic boat Zsee page 77.
- c. DPC wooden landing boat  $\sqrt{\text{see}}$  page  $1\overline{17}$ . It was propeller-driven; not air-driven.
- d. TZI assault bridge set \_see page 127.
- e. Mdpa-3 boat lorry /see pages 23 and 307.
- f. NLP ponton equipment Zee page 257.
- g. NLP raft and boats /see page 297.
- h. DLP bridge zee page 317.

### ENCLOSURE:

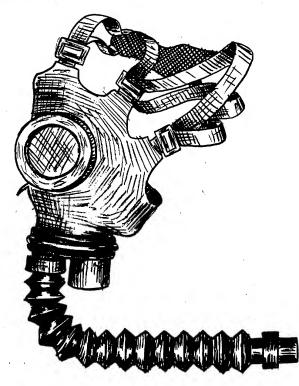
A. New Soviet Gas Mask

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Enclosure A

New Soviet Gas Mask

Note: Source was not sure of the model, name, or number of this gas mask, but thought that it might possible be designated BM-3.



25X1A Date of Info: Basis of Info:

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